

over the inner white surface of the test, and they are merely cavities in connection with the blood-vessels, which may also be seen here and there in sections. A number of smaller blood cavities are present just below the outer surface of the test, recalling the arrangement in *Culeolus*, but the larger vesicles are always more deeply placed (Pl. XXIII. fig. 13).

The folds in the branchial sac are narrow, and the internal longitudinal bars are slender. The arrangement of the transverse vessels is shown on figure 11, Plate XXIII.; above the large transverse vessel (*tr.*) two rows of stigmata are seen passing into one. In some parts of the sac the stigmata are longer and narrower than in the part figured. On account of the fewness of the internal longitudinal bars, the meshes are much elongated transversely. Muscle fibres are seen well in some of the vessels of this branchial sac (Pl. XXIII. fig. 12).

Three specimens of *Polycarpa sulcata* were dredged off Banda, in the Moluccas; depth, 17 fathoms.

*Polycarpa pedata*, Herdman (Pl. XXIV. figs. 1 and 2).

*Polycarpa pedata*, Herdman, Prelim. Rep., Proc. Roy. Soc. Edin., 1880-81, p. 71.

*External Appearance.*—This species is irregularly club-shaped, and consists of a long stalk supporting a somewhat globular body produced anteriorly. The posterior end of the body is broad and rounded, and passes rapidly into the narrow stalk, which is nearly as long as the body. The ventral edge is nearly straight; the dorsal is strongly convex in its posterior half, and straight in the anterior part. The animal is attached by the extremity of the long narrow stalk. The branchial aperture is terminal, it is very prominent, and is directed anteriorly; the atrial is on the dorsal edge, about half way down the body; it projects, and is directed anteriorly and dorsally; both are distinctly four-cleft.

The surface is smooth, but grooved and creased somewhat. The colour is yellowish-white, with a tinge of red on the stalk.

Length of the body (total), 10·5 cm.; breadth of the body, 4 cm.

*The Test* is thin but tough.

*The Mantle* is moderately thick, but adheres here and there to the test; the musculature is close but not strong.

*The Branchial Sac* has four folds upon each side. The transverse vessels are all of one size. The internal longitudinal bars are numerous. The meshes are slightly elongated transversely, and contain each five or six stigmata.

*The Dorsal Lamina* is a plain membrane.

*The Tentacles* are long and of a brown colour. There are twenty-five of them, and they are all of one length.